
EFL LEARNERS' POST-EDITING ON GOOGLR ENGLISH-INDONESIAN TRANSLATION OUTPUT

Bella Anggrina, Kripa Ellan Pramudita, and Suparmi

Universitas Negeri Padang
Bella.Anggrina@yahoo.co.id

Abstract

Machine Translation (MT) helps people in translating one language into another language automatically without human intervention. One of MT is Google Translate which use for language learners to get information and to access new knowledge in another language. However, GT has some limitations in translation. It produces less accurate meaning and many errors occurred in its output. To achieve high-quality output, EFL learners use post-editing in revising translations output that have been produced by a machine translation (MT) system. There are two levels of Post-editing, namely light and full-post editing. In this study, the researchers investigated how the EFL learners used post-editing on Google English-Indonesian translation output. The item of the instrument was translation test. The test used in this study was Google English-Indonesian translation output. The participants of this study consisted of 20 graduate students of English Department of Universitas Negeri Padang who are taking translation subject. The data were gathered by using translation test. Then, the data were analyzed qualitatively. The result showed that both levels are used by the learners. In light post-editing, the learners modified lexical and syntax categories by replacing and adding the words. Meanwhile, in full post-editing technique, the students not only modified lexical and syntax categories, but also used appropriate style, fluency, and maintain the perfect faithfulness of the source text.

Keywords: Machine Translation, Post-Editing, Google Translate

1. INTRODUCTION

In this globalization era, mastering English both orally and written is a need for everyone in order to access every news and information in all aspect of life. News, books and journals are published mostly in English. That is why many people who do not master English will get difficulties and are left behind in accessing the information. However, not all information contained in English books can be understood well by those who speak English as foreign language. Because of those reason, this brings about the requirement of a high level of speed and productivity in translation services. Machine translator (MT) is one among those technological services. MT is computer software which has an automatic translation system that processes a source text in one language and creates a target text in another language (EAMT, 2010). Thus, MT provides people to help them in translating one language into another language automatically without human intervention and the content in foreign language can be easily understood by them as non-native speakers.

Google Translate (GT) is one of popular MT used by many people around the world. GT is a free machine translation service made available by the Google Company for translating texts and messages from one language into another, it is not only facilitated for professional translator for publication and helping reader to understand the ideas in foreign languages, but it is also applied to language learning in assisting language learners to deal with linguistic differences to get information and to access new knowledge in another language (lin & Chien, 2009). According to research done by Nino (2005), the two most commons purposes of MT use were for reading comprehension and for writing in a foreign language. Students admitted that MT provides them academic and scientific

terms for writing assignments. However, GT has some limitations in translation. It produces less accurate meaning and many errors occurred in its output. It may cause problems when students put words, phrases, and full texts into the software without being aware of these drawbacks (McCarty, 2004 cited in Somers, et al, 2006).

EFL learners still use GT as their primary option machine translation to help their work in translating. It is because GT easy to be accessed and familiar. They realize the inaccurate translation from GT will impact to their translation quality, because the knowledge of grammar and words - and more importantly - world knowledge of “machines” are limited as compared to those of humans. Therefore, MT systems usually make more mistakes than humans and the outcome might be difficult to understand. To achieve high-quality output, EFL learners still need their translation knowledge in correction of the GT translation output. The correction of MT translation output called Post-editing. It means tidying up the raw output, correcting mistakes, revising entire, or, in the worst case, retranslating entire sections, and makes the correction of texts that have been translated from a source language into a target language by a machine translation system (Somers, 2001). Thus, the post-editing process is necessary, this is the next step after completing the machine translation (MT) process and evaluating its output. A human translator processes should verify the source and target texts conveys the same information and that the tone of the translation is consistent with the original document.

This research focuses on analyzing the EFL learners’ post-editing on Google English-Indonesian translation output. The researchers formulate the research question as: how do the EFL students use post-editing on Google English text into Indonesian?

2. LITERATURE REVIEW

A. Machine Translation

Machine Translation (MT) is an automatic translation system that processes a source text in one language and creates a target text in another language. According to, the European Association for Machine Translation (EAMT) define Machine translation is an application software in computers which the task is to translating texts from one language to another. In addition, the Localization Industry Standards Association (LISA, 2010) defines machine translation is a method for translating something from one language to another automatically, without human intervention. According to the Systran soft (2014) webpage, there are three major approaches to MT:

- 1) Rule-based – such MT systems use built-in linguistic rules and a great number of bilingual dictionaries to create translations. They analyze the sentences of the source text, after which they transfer their grammatical structures into the target language. They usually offer greater quality of translation but they have high initial and maintenance costs;
- 2) Statistical – these MT systems generate translations using statistical models based on corpora that consist of translations done by human translators. They analyze the texts from the corpora, interpret the connections and offer solutions. Initial costs for such systems are low, but they require large multilingual corpora, extensive hardware and excellent programmers’ knowledge in order to provide good-quality solutions;
- 3) Example-based – these MT systems also contain corpora, but in their case source text sentences and sentence elements are compared to sentences from the corpora, and translations are created based on existing sentences with similar elements (Duh, 2005).

In summary, machine Translation is the translation of text by a computer system, with no human involvement. There are three major approaches to MT, namely Rule-based – such MT, Statistical, and Example-based systems. MT software and systems have advantages over traditional, fully human translation, but they also have numerous disadvantages. Also, the quality of translations output is still too low to be used commercially without human post-editing, so it need to be edited (revised) to attain publishable quality.

B. Post-Editing

In order to improve the final outcome, two types of editing are employed in the translation processes where MT are used. These are pre-editing and post-editing. Pre-editing involves applying “controlled language rules” on the source text, thereby making it more plain and standard in terms of its form and style. Here, the main aim is to obtain better raw MT output by controlling the input. Post-editing, on the other hand, is the process of editing the texts that are pre-translated using a machine translation or a translation memory system. Here, the aim is to improve the MT output quality by post-editing it to various levels depending on the purpose of the target text use. It is also possible to implement both pre and post-editing together to obtain better results.

Allen (2003) states that “ in basic terms, the task of post-editor is to edit, modify and/or correct pre-translated text that has been processed by an MT system from a source language into (a) target language(s)”. Similarly, Schäfer (2003) defines post-editing as “the task of polishing up the raw MT output to an acceptable, end-user friendly text quality”. Thus, post-editing is examination and correction of the text that have been translated from a source language into a target language by a machine translation system which can mean, “tidying up the raw output, correcting mistakes, revising entire, or, in the worst case, retranslating entire sections”.

There are several factors which determine the level of post-editing. These are raw output quality, demanded final translation quality and the purpose of the target text with regard to its use. According to Allen (2003), there are 2 levels of post-editing to be performed on a text.

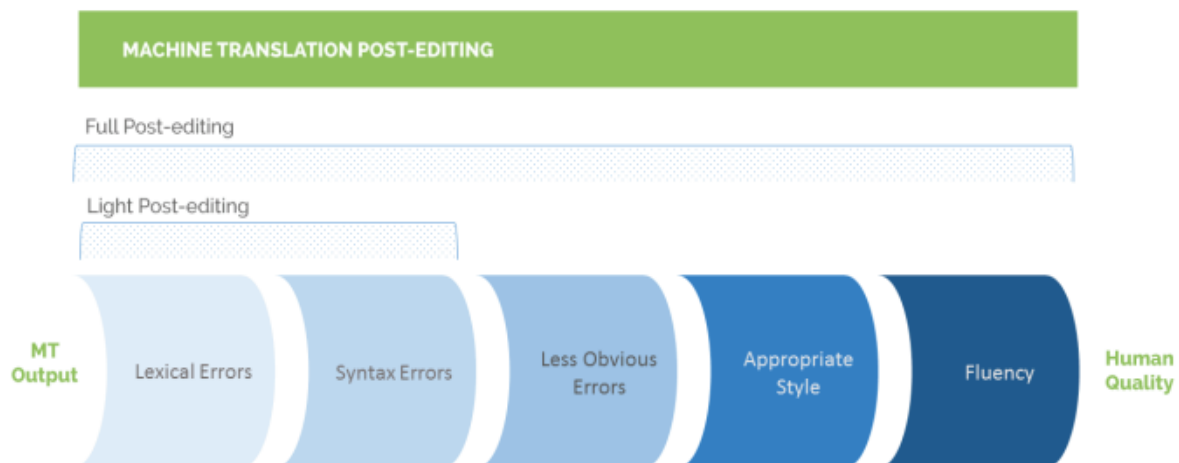
1) Light Post-editing

Light post-editing is also referred to as rapid post--editing (RPE) or minimal post-editing. A light post-edit process focuses on lexical errors and syntax errors inherent in the MT. The realm of machine translation light post-editing tasks includes correcting typos, errors in grammar and word usage errors. The process may involve rewriting sentences or changing phrases to make the text more understandable and the meaning clear. In addition, TAUS (2010) lists the type of modifications appropriate for light post-editing as follows (1) replacing unknown words, (2) deleting superfluous translation alternative generated by the machine, (3) repairing machine-induced meaning distortion (possibly the chief priority), (4) correcting the most salient word and grammatical errors, (5) partially or wholly rewriting some sentences.

2) Full Post-Editing (FPE)

Basically, full-post-editing means editing the MT output to the level of quality which is expected from a human translator. It involves all the steps to be taken in the light post-editing practice, plus more detailed modifications and stylistic changes to produce a target text that reads like a human translation. Full post-editing is usually applied to the MT output which is intended for dissemination and required to be of publishable quality. According to the TAUS (2010) reports the large majority of MT output in production settings needs to be post-edited to the same quality level as that found in a standard human translation.

Full post-editing expands to correct less obvious errors, insure appropriate style, and achieve comparable fluency. These additional tasks include verifying that terminology is translated correctly and consistently throughout the document and making sure that technical terms are properly translated and standardized when compared to other translations in the same subject or field. To make it simply, the following diagram by TAUS & Csa (2016) gives a general outline of what is involved in both light and full post-editing.



process.

C. Google Translate

Google Translate is a service provided by Google Inc. to translate a section of text, or a webpage, into another language without any human involvement. The users allows to access and interpret webpages on servers thousands of miles away just in one click. Google Inc. Company started to offer a basic translating service in 2001 for eight languages and later expanded to more languages in 2003. The service limits the number of paragraphs, or range of technical terms, that will be translated. In September 2016, Google's service has been providing support to translate 103 languages at various level (Google Translate, 2016).

Franz-Josef Och (2005) stated that translator engine "Google" based on "statistically based machine translation" that is able to translate documents, texts or web pages into another language. Google Translate, like other automatic translation tools, has some limitations. While it can help the reader to understand the general content of a foreign language text, but does not provide an accurate translation. Google's use of machine translation is easy.

In conclusion, Google Translate provides machine translations produced purely by technology, without intervention from human translators. Google's robust statistical machine translation tool is used by more than 500 million users' worldwide. Google translate work with use statistical analysis rather than traditional rule-based analysis, so that it can often include apparently nonsensical and obvious error.

3. RESEARCH METHOD

This research is designed as descriptive research. The descriptive research is appropriate to be conducted in this research since the aim of this research to find out the EFL students' post-editing on Google English-Indonesian translation output. It is also worth noting that the information about the research participants in this research was gathered at a single point in time. The subjects of this study were 20 graduate students of university in Padang. Translation test was used to gather the data of the research.

The items of the instrument is the translation test. The test is translation output from Google Translate in translating an English article "Language and Gender" written by Suzane Romaine from Merton College into Indonesian which the researchers has been translated by using Google Translate on February 05 2017.

4. DATA ANALYSIS AND DISCUSSION

In order to improve the final outcome on google English-Indonesian translation text, EFL students used post editing technique in correcting **the translated text** which they are tidying up the raw output, correcting mistakes, revising entire, or, in the worst case, retranslating entire sections. They are two levels of post-editing, namely; light and full post-editing. Basically, most of EFL Students used light post editing on google English-Indonesian translation output.

The following discussion is describing how the students used light and full post editing.

a. Light Post-Editing

Light post-editing focuses on lexical errors and syntax errors inherent in the MT , such as replacing the inappropriate word, omission, addition, and word order, as shown in following data: (Note: ST (Source Text), GT (Translation output from Google Translate), TT (Target text made by learners).

1) **ST** : *It both constructs and perpetuates that reality*

GT: *Ini baik konstruksi dan melanggengkan bahwa realita*

TT: *Ini baik “membangun” dan “mempertahankan” realita itu*

2) **ST**: *Feminist research from the 1960s onwards has articulated a critical stance...*

GT: *Penelitian feminis dari tahun 1960 seterusnya telah diartikulasikan sikap kritis....*

TT: *Penelitian **tentang** feminis **sejak** tahun 1960 dan seterusnya telah **mengemukakan** sikap kritis...*

In datum 1, it could be seen that GT translated the word *construct* into *konstruksi* and *perpetuates* into *melanggengkan*. In datum 2, the learner also edited the GT output by replacing and adding. In this case, the learner replaced the word *dari* into *sejak* and *diartikulasikan* into *mengemukakan*, and he/she also added the ‘ word *tentang*. Based on the students’ post-editing above, it seems that the learner considered this inaccuracy of the words, because the result of GT translation was perceived inappropriate with the context of text discussed. Also, the learners just edited the obvious errors in this sentence, as it is claimed by Densmer (2014) that “ in light post-editing, the post-editor corrects only the most obvious errors and rewrite confusing sentences”. Based on the data above, most of the learners tended to replace and add in light post-editing on Google English-Indonesian output.

b. Full Post-Editing

Full post-editing focuses on correct less obvious errors, insure appropriate style, and achieve comparable fluency in the MT.

1) **ST**: *Feminist research from the 1960s onwards has articulated a critical stance toward gender as an analytical category. This chapter examines the fundamental role of language in constructing and representing gender. On strand of research has addressed the question of whether women and men speak differently, and explore the nature of femininity and masculinity and how their associated ideologist are expressed in language. Another has illustrated how language plays an active role in the symbolic positioning of women as inferior to men. It both constructs and perpetuates that reality, often in obvious ways, but at others time in subtle and invisible ways. Woman are often marked as deviant and deficient, or made invisible through a variety of linguistic practices revealing the ideological construction of MAN (male as norm).*

GT: *Penelitian feminis dari tahun 1960 dan seterusnya telah diartikulasikan sikap kritis terhadap gender sebagai kategori analitis. Bab ini mengkaji peran mendasar dari bahasa*

dalam membangun dan mewakili gender. Pada untaian penelitian telah menjawab pertanyaan apakah perempuan dan laki-laki berbicara secara berbeda, dan mengeksplorasi sifat feminitas dan maskulinitas dan bagaimana ideologit yang terkait disajikan dalam bahasa. Lain telah menggambarkan bagaimana bahasa memainkan peran aktif dalam posisi simbolik wanita lebih rendah dari pria. Ini baik konstruksi dan melanggengkan bahwa realitas, seringkali dalam cara yang jelas, tetapi pada saat yang lain dengan cara yang halus dan tak terlihat. Wanita sering ditandai sebagai menyimpang dan defisien, atau dibuat tidak terlihat melalui berbagai praktik linguistik mengungkapkan pembangunan ideologis MAN (laki-laki sebagai norma).

TT: Penelitian tentang feminis sejak tahun 1960 dan seterusnya telah membahas sikap kritis terhadap jenis kelamin sebagai kategori analitis. Bab ini akan mengkaji peran mendasar dari bahasa dalam membangun dan mewakili jenis kelamin berdasarkan bahasa, rangkaian penelitian telah menjawab pertanyaan apakah laki-laki dan perempuan berbeda, mereka mengeksplor sifat alamiah dari feminim dan maskulin dan bagaimana mereka menghubungkan ideologi yang di ekspresikan dalam bahasa, dan yang lainnya menggambarkan bagaimana bahasa memiliki peranan aktif dalam posisi simbolik wanita lebih rendah dari laki-laki. Kedua hal tersebut membangun dan mempertahankan realitas yang ada, seringkali dengan cara yang jelas, tapi pada saat yang lain dengan cara yang halus dan tak terlihat. Perempuan sering ditandai dengan penyimpangan dan kekurangan, atau dibuat tidak terlihat melalui berbagai bentuk praktek linguistik mengungkapkan pembentukan ideologi dari Man (laki-laki sebagai norma).

- 2) **ST:** Evidence can be found in asymmetries between pairs of gender-differentiated terms such as master and mistress, etc., where the female term has negative associations, while the male term is either neutral or positive. Another example consists of the use of masculin forms such as he, man and compounds such as mankind, chairman, etc. in a so-called generic sense to include women, e.g. all men are created equal. Another example is the marking of terms and names referring to woman and/or the derivation of female terms from male terms, e.g. actor/actress, etc. Such usages illustrate how women have been constructed as 'Other' and how femininity is perceived as masculinity inverted. Women are the 'second sex' or [-male]. Reform of sexist language has played a crucial role in the struggle for gender equity. Because languages vary in terms of the amount of sexism they display, language reform has taken somewhat different directions in languages such as English compared to other languages such as French, where attention is constantly drawn to the issue of gender by virtue of the requirements of grammatical agreement.

GT: Bukti dapat ditemukan di asimetri antara pasangan istilah dibedakan gender seperti tuan dan nyonya, dll, dimana istilah perempuan memiliki asosiasi negatif, sedangkan istilah laki-laki baik netral atau positif. Contoh lain terdiri dari penggunaan bentuk maskulin seperti dia, manusia dan senyawa-senyawa seperti manusia, ketua, dll dalam arti umum disebut untuk menyertakan perempuan, misalnya sama manusia diciptakan sama. Contoh lain adalah menandai istilah dan nama mengacu pada wanita dan / atau derivasi dari istilah wanita dari segi laki-laki, misalnya aktor/ aktris, dll. Penggunaan tersebut menggambarkan bagaimana perempuan telah dibangun sebagai 'lain' dan bagaimana feminitas dianggap sebagai maskulinitas terbalik. Wanita adalah 'seks kedua' atau (-pria). Reformasi bahasa seksis telah memainkan peran penting dalam perjuangan untuk kesetaraan gender. Karena bahasa bervariasi dalam hal jumlah seksisme yang ditampilkan, reformasi bahasa telah mengambil arah yang agak berbeda dalam bahasa seperti bahasa

Inggris dibandingkan dengan bahasa lain seperti Perancis, di mana perhatian terus tertarik ke masalah gender berdasarkan persyaratan gramatikal persetujuan.

TT: *Bukti dapat ditemukan dalam perbedaan istilah pasangan gender yang tidak setara antara wanita dan pria. Contohnya master (tuan) dan mistress (nyonya) dimana istilah permepuan memiliki asosiasi yang negatif, sementara laki-laki bersifat netral atau positif. Contoh lain terdiri dari penggunaan istilah-istilah (yang bersifat) maskulin seperti he (dia(lk)), man (laki-laki) dan kata manjemuk seperti mankind (ras manusia), chairman (ketua), dll. Dalam artian umum mencakup wanita seperti all men are created equal. Contoh lain adalah pemberian sebutan dan penamaan yang merujuk pada wanita dan atau istilah bagi wanita yang merupakan turunan dari sebutan laki-laki, contohnya actor/ actresses, dll. Berbagai penggunaan tersebut menggambarkan bagaimana wanita telah dibentuk sebagai 'other' (yang lainnya) dan bagaimana feminitas dipersepsikan sebagai kebalikan dari maskulinitas. Wanita adalah 'jenis kelamin yang kedua' atau (male). Perubahan bahasa berdasarkan jenis kelamin memerankan peranan yang penting dalam memperjuangkan kesetaraan gender. Karena bahasa bervariasi dalam segi jumlah seksisme yang ditampilkan, perubahan bahasa telah mengambil arah yang berbeda dalam berbagai bahasa seperti bahasa Inggris dibandingkan dengan bahasa lainnya seperti bahasa perancis, di mana permasalahan gender selalu menjadi fokus perhatian berdasarkan persyaratan gramatikal.*

In datum 1, the learners modify the MT translation output into human translation by replacing and adding many appropriate words, and also rewrote sentences to make the meaning of ST close to TL. Meanwhile, in datum 2, besides replacing, adding, and rewriting the learner also maintains the perfect faithfulness of the source text without replacing the English word into Indonesian like GT performed, for example *he (dia(lk)), man (laki-laki), mankind (ras manusia), chairman (ketua), all men are created equal, actor/ actresses, 'other' (yang lainnya), and 'jenis kelamin yang kedua' atau (male)*. As it is claimed by Densmer (2014) “in full post-editing, the post-editor makes modifications in accordance with practice for the TL, be consistent, appropriate and fluent in TL, rewrite confusing sentences, perfect faithfulness to the source text; fix machine-induced mistakes; delete unnecessary or extra machine-generated translation alternatives; cross-reference translations against other resources; human translation quality”

5. CONCLUSION

Machine Translation is provided to help people in translating one language into another language automatically without human intervention and the content in foreign language can be easily understood by them as non-native speakers. MT such as Google Translate is not only facilitated for professional translator for publication and helping reader to understand the ideas in foreign languages, but it is also applied to language learning in assisting language learners to deal with linguistic differences to get information and to access new knowledge in another language. However, GT could not provide translation outcomes at accurate linguistic level for English learning; therefore students should not rely completely on its translation outcomes because it has some limitations in translating the text. It produces less accurate meaning and many errors occur in its output.

To achieve high-quality output, EFL learners should use post-editing in revising translations output that have been produced by a machine translation (MT) system. Post-editing is the next step after completing the machine translation (MT) process and evaluating its output by tidying up the raw output, correcting mistakes, revising entire, or, in the worst case, retranslating entire sections, and making the correction of MT output.

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